

The Living Green Infrastructure Lab: Advancing Interdisciplinary Teaching and Experiential Learning in Landscape Architecture

Pedagogy

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1. ABSTRACT

Demonstrating and experimenting interdisciplinary teaching and experiential learning, faculty and students across three colleges (Agriculture and Life Sciences, Architecture and Engineering), and 4 departments (Landscape Architecture and Urban Planning, Horticultural Sciences, and Civil, Biological and Agricultural Engineering) designed, implemented, and are monitoring effects of a rain garden. This collaboration presents a model for multi-scalar, interdisciplinary studio instruction involving a project conducted by over 200 undergraduate and graduate students across allied fields. Landscape Architecture students provided designs, construction details, and performance monitoring of the site as well as developed a large-scaled campus master plan. Horticultural Sciences students propagated and produced the plants. Civil engineers assisted with constructed infrastructure design and water quality/quantity assessment. Professional landscape architects, urban planners, horticulturalists, engineers and campus facilities maintenance personnel evaluated student work. This paper specifies lessons learned from the application of a program that sought to educate and train students in LID alternatives to traditional stormwater management through hands-on outdoor classroom activities. While opportunities for interdisciplinary networking, knowledge of the landscape construction process, and the ability to utilize scientific rationale for design decision making all increased, challenges included coordination efforts across disciplines, overcoming unknown nomenclature specific to each field, delays due to unforeseen circumstances, and budgetary increased as a result of maintenance issues. However, Collaboration between multidisciplinary professionals enabled students to experience the professional design process and have a deeper understanding of the positive impacts of green infrastructure through interdisciplinary experiential learning.

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